Application No.: 10/584,288 Docket No.: 17214/013001

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A steel manufacturing dust, which is a solid <u>iron</u> product formed by pressing and <u>forming reforming a dust dusts</u> occurring in exhaust gases within a melting furnace during an iron and steel manufacturing process and subsequently collected by a dust collector, and containing iron as a principal component, wherein the solid product contains neither organic nor oxide binder.

- 2. (Currently Amended) The <u>solid iron product</u> steel manufacturing dust as claimed in claim 1, wherein the pressing and <u>forming reforming</u> is caused by a mold.
- 3. (Currently Amended) The <u>solid iron product</u> steel manufacturing dust as claimed in claim 1, wherein the solid dust-iron product is a columnar body having a round cross-sectional shape.
- 4. (Currently Amended) The <u>solid iron product</u> steel manufacturing dust as claimed in claim [[2]] 3, wherein the solid dust-<u>iron</u> product is 50 to 100 mm in diameter and 30 to 80 mm in height.
- 5. (Currently Amended) The solid iron product steel manufacturing dust as claimed in claim 4, wherein the ratio of the height relative to the diameter is within the range of 0.7 to 0.8.
- 6. (Currently Amended) A process of manufacturing steel manufacturing dust, comprising:

subsequently collecting wherein a dust dusts, occurring in exhaust gases within a melting furnace during an iron and steel manufacturing process and subsequently collected by a dust collector, and containing iron as a principal component, is charged;

charging the dusts into and pressed within a mold;

pressing the dusts within the mold to provide a solid iron product; and

reentering the solid iron product into the iron and steel manufacturing process,

wherein the solid iron product contains neither organic nor oxide binder.

Application No.: 10/584,288 Docket No.: 17214/013001

7. (Currently Amended) The process of manufacturing steel manufacturing dust as claimed in claim 6, wherein the mold is in the form of a vertically oriented cylindrical chamber.

- 8. (Currently Amended) The process of manufacturing steel manufacturing dust as claimed in claim 6, wherein a powder of carbon, aluminum or the like generated during the iron and steel manufacturing process is mixed in the dust as a binder, and is then charged into the mold.
- 9. (Currently Amended) A manufacturing apparatus for a <u>solid iron product that contains neither</u> an <u>organic nor oxide binder, steel manufacturing dust</u> comprising:
 - a mold in the form of a cylindrical chamber;
 - a lid member for closing one end of the mold; and
 - a plunger capable of advancing from an opposite end into the mold to press a dust dusts, occurring in exhaust gases within a melting furnace during an iron and steel manufacturing process and subsequently collected by a dust collector, and containing iron as a principal component, within the mold.

wherein the apparatus forms the solid iron product with adding neither the organic nor oxide binder.

10. (Currently Amended) The manufacturing apparatus for the <u>solid iron product steel</u> manufacturing dust as claimed in claim 9, wherein the mold is oriented vertically and the end at which the lid member of the mold is provided is at a lower side.